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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,662	12/22/2003	Kenneth Smith	10013804-1	7608
22879 7590 12/28/2006 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER IQBAL, NADEEM	
			ART UNIT 2114	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/28/2006	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/743,662

Applicant(s)

SMITH ET AL.

Examiner

Nadeem Iqbal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 18-23 is/are rejected.
- 7) ☒ Claim(s) 11-17,24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

This office action is in response to an amendment filed on Sep 21, 2006.

***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 2 & 21 are provisionally rejected on the ground of nonstatutory double patenting over claim 17 of copending Application No. 2003/0023928. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: With reference to a magnetic random access memory array that comprises a plurality of magnetic memory cells. The referenced application teaches (claim 17, lines 1-3), With reference to a controller coupled to MRAM array. The referenced application

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teaches (claim 17, lines 7-8). With reference to the controller is configured to communicate with a host device and controller is configured to perform an error correction function associated with at least one of the plurality of magnetic memory cells. The referenced application teaches (claim 17, lines 4-6).

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-10, 18-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nahas (U.S. Patent Application number 2005/0144551).

5. As per claim 1, Nahas teaches (page 1, para. 0011, lines 1-3) an embedded memory system having error correction circuitry with a counter for counting detected errors. He also teaches an MRAM core, MRAM core also has an error, read and write counts field. He thus teaches a magnetic random access memory (MRAM) array. With reference to a controller

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coupled to the MRAM. He teaches (page 2, para. 0012, lines 4-7). With reference to controller is configured to perform an error correction function. He teaches (page 2, para. 0012, lines 1-4).

6. As per claim 2, With reference to the controller comprises an error correction module. He teaches (page 2, para. 0012, lines 1-4).

7. As per claims 3 & 4, With reference to the error correction module comprises Reed-Solomon encoding and decoding devices. He teaches (page 1, para. 0012, lines 2-5).

8. As per claims 5 & 6, With reference to error correction module is configured to perform a data layout algorithm. He teaches (page 2, para. 0020, lines 1-5).

9. As per claims 7 & 8, With reference to the controller is configured to perform the error correction function in response to a write operation. He teaches (page 2, para. 0015, lines 2-6).

10. As per claim 9, With reference to the controller is configured to perform the error correction function in response to a read operation. He teaches (page 2, para. 0014, lines 1-6).

11. As per claim 10, Nahas teaches (page 1, para. 0011, lines 1-3) an embedded memory system having error correction circuitry with a counter for counting detected errors. He also teaches an MRAM core, MRAM core also has an error, read and write counts field. He thus teaches a magnetic random access memory (MRAM) array. With reference to a controller coupled to the MRAM. He teaches (page 2, para. 0012, lines 4-7). With reference to controller is configured to perform an error correction function. He teaches (page 2, para. 0012, lines 1-4).

12. As per claims 18 & 21, Nahas teaches (page 1, para. 0011, lines 1-3) an embedded memory system having error correction circuitry with a counter for counting detected errors. He also teaches an MRAM core, MRAM core also has an error, read and write counts field. He thus teaches a magnetic random access memory (MRAM) array. With reference to a controller

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coupled to the MRAM. He teaches (page 2, para. 0012, lines 4-7). With reference to controller is configured to perform an error correction function. He teaches (page 2, para. 0012, lines 1-4).

13. As per claims 19 & 22, With reference to the controller is configured to perform the error correction function in response to a write operation. He teaches (page 2, para. 0015, lines 2-6).

14. As per claims 20 & 23, With reference to the controller is configured to perform the error correction function in response to a read operation. He teaches (page 2, para. 0014, lines 1-6).

#### ***Allowable Subject Matter***

15. Claims 11-17, & 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

16. Applicant's arguments with respect to claim 1-24 have been considered but are moot in view of the new ground(s) of rejection.

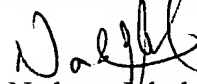
#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadeem Iqbal whose telephone number is (571)-272-3659. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)-272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Nadeem Iqbal  
Primary Examiner  
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NI